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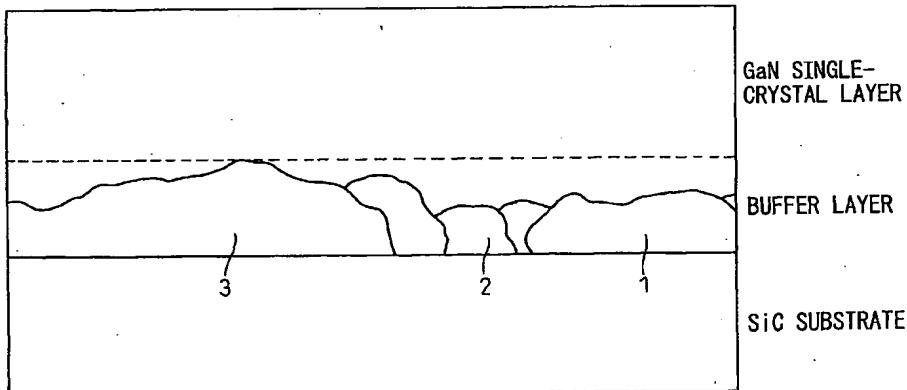
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(54) Title: GROUP III NITRIDE SEMICONDUCTOR MULTILAYER STRUCTURE



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(57) Abstract: An object of the present invention is to provide a Group III nitride semiconductor multilayer structure having a smooth surface and exhibiting excellent crystallinity, which multilayer structure employs a low-cost substrate that can be easily processed. Another object is to provide a Group III nitride semiconductor light-emitting device comprising the multilayer structure. The inventive Group III nitride semiconductor multilayer structure comprises a substrate; an $Al_xGa_{1-x}N$ ($0 \leq x \leq 1$) buffer layer which is provided on the substrate and has a columnar or island-like crystal structure; and an $Al_xIn_yGa_{1-x-y}N$ ($0 \leq x \leq 1, 0 \leq y \leq 1, 0 \leq x + y \leq 1$) single-crystal layer provided on the buffer layer, wherein the substrate has, on its surface, non-periodically distributed grooves having an average depth of 0.01 to 5 μm .

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